



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/054,653 Confirmation No.: 9448  
First Named Inventor: Bulucea, Constantin Filing Date: 18 January 2002  
Group Art Unit: 2814 Examiner: Farahani, D.  
Atty. Docket No.: NS-5127 US  
Title: Gate-Enhanced Junction Varactor With Gradual  
Capacitance Variation  
Assignee(s): National Semiconductor Corporation

Mountain View, California  
18 January 2006

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**AMENDMENT TO DRAWINGS UNDER 37 CFR 1.312**

Sir:

Responsive to the Notices of Allowance and Allowability mailed 18 October 2005 and under the provisions of 37 CFR 1.312, the drawings of the above patent application should be amended as follows:

In Fig. 15, reference symbol "112C" should be changed to "112LC".

In Fig. 17, reference symbols "126A", "126B", and "126C" should be respectively changed to "126A, N<sub>BA</sub>", "126B, N<sub>BB</sub>", and "126C, N<sub>BC</sub>".

Enclosed is a copy of the relevant drawing sheets in which the foregoing changes are indicated in red.

In addition, new Figs. 14.1 and 14.2 should be added as shown on the accompanying informal drawing sheet containing Figs. 14.1 and 14.2.

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## REMARKS

Applicant's Attorney has requested several changes to the drawings to correct a self-evident error and to improve clarity. In particular, Applicant's Attorney has requested that:

a. Reference symbol "112C" for the p++ lower right-hand gate electrode portion in Fig. 15 be changed to "112LC" in conformity with the disclosure in paragraph 198 of the specification that lower gate electrode layer 112L in Fig. 15 consists of very heavily doped n-type polycrystalline silicon ("polysilicon") gate electrode portion 112LAB and very heavily doped p-type polysilicon gate electrode portion "112LC"; and

b. Reference symbols "126A", "126B", and "126C" in Fig. 17 be respectively changed to "126A,  $N_{BA}$ ", "126B,  $N_{BB}$ ", and "126C,  $N_{BC}$ " in conformity with the disclosure in paragraph 207 of the specification that portions 126A, 126B, and 126C of surface depletion region 126 have respective different values  $N_{BA}$ ,  $N_{BB}$ , and  $N_{BC}$  of average net dopant concentration  $N_B$ .

In addition, Applicant's Attorney requests that new Figs. 14.1 and 14.2 be added to the drawings for the reasons presented in the accompanying Amendment to Text under 37 CFR 1.312.

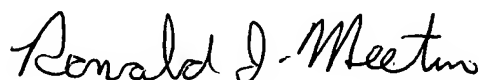
Entry of the present amendment and the accompanying Amendment to Text will not entail materially added work on the Examiner's part. No more than a cursory review of the record will be needed. Accordingly, this amendment and the Amendment to Text should be entered.

Please telephone Applicant's Attorney at 650-964-9767 if there are any questions.

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Respectfully submitted,



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